

Thank you Mr. Maurice for explaining about the Kahc Power Plant. I saw a generator, boilers, stakes, transformers, condensor, operator, control room, fish, voltage, furnace, silver tanks, pipelines. I learned how Electricity is spread out through all of Oahu. Its spread out by pipes/tubes. They heat oil until its liquid and they spread it out through a fan like object. They recycle it. It concerns us because we are using the electricity. If we didn't have a power plant, we wouldn't have any energy/electricity. Nothing would generate/operator. There is only 3 powerplants in Oahu. You can tell how much electricity has been used by reading meters. It was a very interesting field trip. Thank you for letting us come to the Kahc power plant.

Kahe station units use No. 6 heavy oil. The fuel has no sulfur in it. There are 250,000 - 300,000 barrels of oil on station, which is about 17-20 day supply. Each barrel contains 42 gallons. The total storage capacity is 990,000 barrels.

Kahe boilers consume about 14,000-21,000 barrels of oil per day. It is about \$30/barrel, and plants ingest up to 7.5-9.0 million dollars.

There are 6 primary generating units, having a combined capacity of 635 MW. Electricity leaving the station is raised to 138,000 volts for transmission.

Generating units are steam turbine powered. The units are classified as "Reheat units". The largest turbine produces about 190,000 horsepower. Steam is delivered to their turbines at a pressure of 1800 pound square inch, at a temp. 1000°F

Their tallest stack is 475 feet high. Kahe station site is on 4/5 acres of land, and about 4,400 feet of water front. There are two General Motors EMD diesel generators, which are used to start up the steam units if they shut down. No less than 11 people run the plant 24 hours a day, 7 days a week.

Charlene Choy
10.09.02
Period 6

Dear Lief,

Thank you for being our group leader. I learn that the cold water from the ocean is to cool the hot steam in the boiler.

We saw the turbine repairing room. To transport the turbine to repair it, all the pieces come out. Then you remove the ceiling in the repair room and bring in the pieces.

Some floors that we visited was very loud and hot. I could feel the heat just by standing next to the machine. I saw flames in the furnace. But there was one that was white.

The control room was cool. I got to see all the equipments and how they operate the plant. When one of the machines or equipment isn't working, the computer has a small red box that will be blinking.

From,
Charlene Choy